

550,778

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



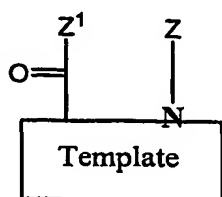
(43) International Publication Date
11 November 2004 (11.11.2004)

PCT

(10) International Publication Number
WO 2004/096838 A1

- (51) International Patent Classification⁷: **C07K 7/06**,
7/08, 14/00
- (21) International Application Number:
PCT/EP2003/004641
- (22) International Filing Date: 2 May 2003 (02.05.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicants (for all designated States except US):
POLYPHOR AG [CH/CH]; Gewerbestrasse 14, CH-4123
Allschwil (CH). **UNIVERSITÄT ZÜRICH** [CH/CH];
Rämistrasse 71, CH-8006 Zürich (CH).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **ZUMBRUNN, Jürg**
[CH/CH]; Hofackerstrasse 48, CH-8964 Rudolfstetten
(CH). **DEMARCO, J., Steven** [US/CH]; Hubwiesstrasse
8, CH-8427 Freienstein (CH). **LOCIURO, Sergio**
[IT/CH]; Rigistrasse 3, CH-8700 Küsnacht (CH). **VRI-
JBLOED, Jan, Wim** [NL/CH]; Vorhaldenstrasse 14,
CH-8049 Zürich (CH). **GOMBERT, Frank** [DE/DE];
Am Rebhang 20, 79588 Huttingen (DE). **MUKHER-
JEE, Reshmi** [IN/CH]; Tulpenstrasse 16, CH-8051
Zürich (CH). **MOEHLE, Kerstin** [DE/CH]; Oberhausen-
strasse 23, CH-8907 Wettswil (CH). **OBRECHT, Daniel**
[CH/CH]; Im Eichhacker 21, CH-4112 Bättwil (CH).
ROBINSON, John, Anthony [GB/CH]; Tobelstrasse 24,
- (74) Agent: **BRAUN, André**; Braun & Partner, Reusstrasse 22,
CH-4054 Basel (CH).
- (81) Designated States (national): AE, AG, AL, AM, AT (util-
ity model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (util-
ity model), DE, DK (utility model), DK, DM, DZ, EC, EE
(utility model), EE, ES, FI (utility model), FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: TEMPLATE-FIXED PEPTIDOMIMETICS AS MEDICAMENTS AGAINST HIV AND CANCER



(57) Abstract: Template-fixed B-hairpin peptidomimetics of the General Formula (I); wherein Z¹ and Z² are template-fixed chains of 4 and 6 or 5 and 7 α-amino acid residues which, depending on their positions in the chain are Gly, or Pro, or of certain types which, as the remaining symbols in the above formula, are defined in the description and the claims, and salts thereof, have the property to prevent or to reduce HIV infections or to inhibit the growth of cancer cells or to inhibit inflammation. They can be used as medicaments to treat or prevent HIV infections and/or cancer or inflammatory disorders. These β-sheet peptidomimetics can be manufactured by a process which is based on a mixed solid- and solution phase synthetic strategy.

WO 2004/096838 A1